Border Eagle

Laughlin Air Force Base, Texas ... Together we 'XL'

Air Amistad
Laughlin Air Force Base, Texas

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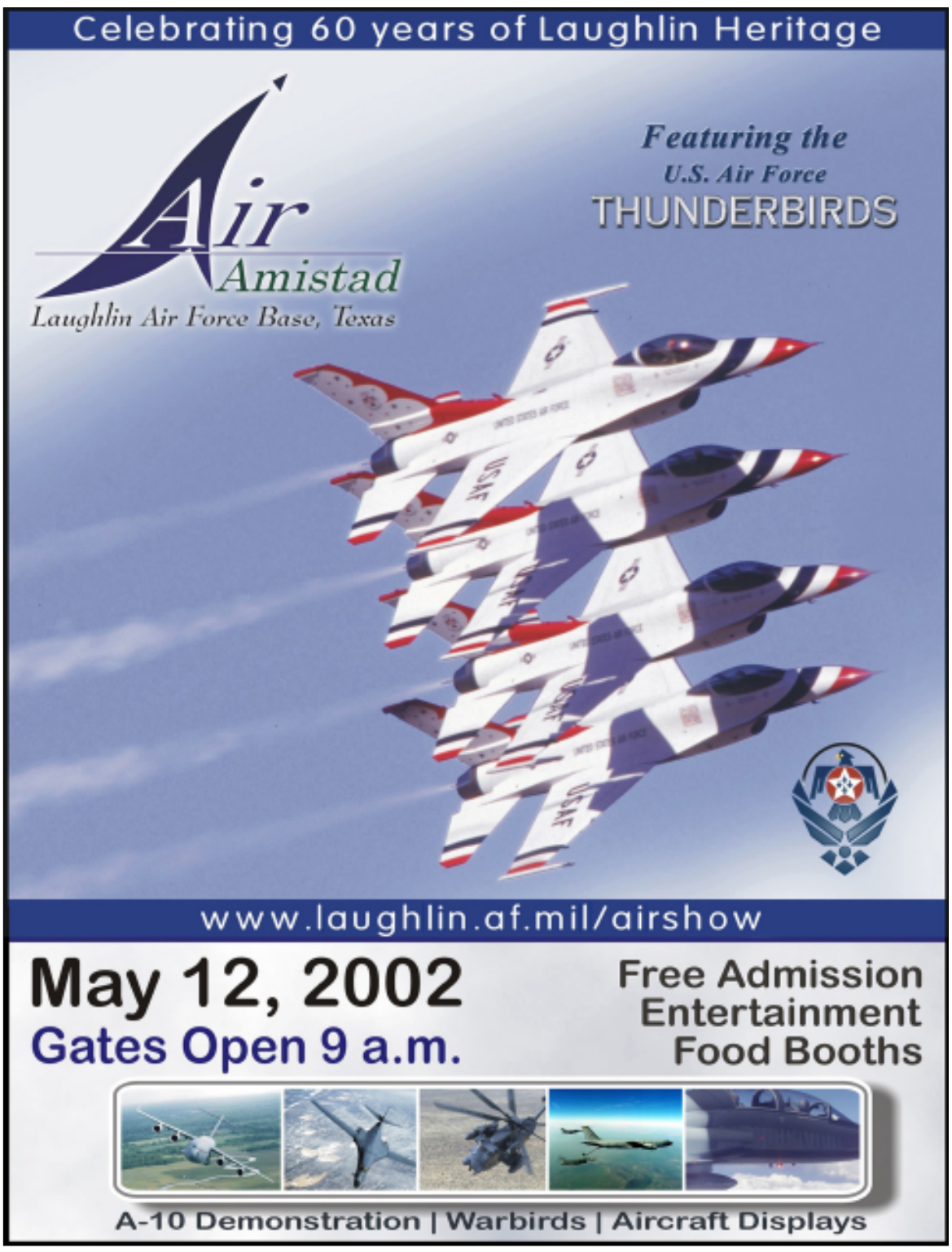


Schedule of events

(Subject to change)

Wings of Blue Parachute Team jump

T-37, T-38 and T-1 flybys

P-40 aero demonstration

Thunderbirds engine run

A-10 demonstration

P-51/ Japanese Zero dogfight/demo

A-10/P-51 heritage flight

T-28 formation/aero demonstration

F-18 demonstration

F-117 demonstration (flyby)

T-33/Mig15 demo/dogfight

Wing commander's remarks

47th Flying Training Wing dissimilar formation

Thunderbirds ground show

Thunderbirds demonstration

Autographs

the inside Scoop

Commander's welcome

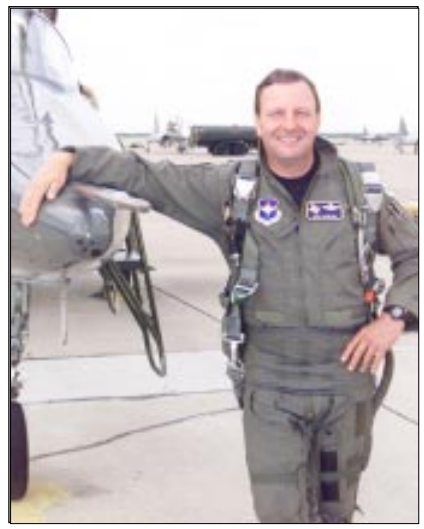
Dear friends and neighbors,

On behalf of the men and women of the 47th Flying Training Wing, it is my pleasure to welcome you to Laughlin Air Force Base and Air Amistad 2002. This event is our way of saying "Thank You" to Del Rio and surrounding communities for your ongoing support and partnership.

This year's show promises to be better than ever. Guests will see aerial performances by the West Coast A-10 Demonstration Team, the Navy's F-18 Demonstration Team, a flyby by the F-117 Nighthawk and a dogfight between a T-33 and MiG-15 – and that's just the tip of the iceberg! Other attractions include the U.S. Air Force Academy's Wings of Blue Parachute Team and the Lackland Air Force Base Drill Team. We'll cap the show with the Air Force's aerial demonstration team, the Thunderbirds.

Please take the time to talk to our airmen during your visit. These dedicated, professional men and women are the reason the United States has the most powerful and respected air and space force in the world – and we are proud of Laughlin's important role in training the world's best pilots.

We hope everyone leaves here today with a better understanding and appreciation of the U.S. Air Force and Laughlin Air Force Base. Enjoy!



Col. Rick Rosborg

Sincerely,

Col. Eric J. Rosborg
47th Flying Training Wing Commander

Estimados amigos y vecinos,

Es un placer para mí darles la bienvenida a la Base Aérea Laughlin y a Air Amistad 2002 en nombre del personal del Ala 47 de Entrenamiento de Vuelo. Este evento es nuestra manera de decir "Gracias" a Del Río y comunidades aledañas por su apoyo y compañerismo.

Este año la exhibición aérea promete ser de lo mejor. Ustedes podrán presenciar diversas demostraciones aéreas a cargo de aviones A-10 de la Fuerza Aérea, y aviones F-18 de la Fuerza Naval. Disfrutará de un desfile aéreo por el avión F-117 Nighthawk, y de un combate aéreo entre los aviones T-33 y MIG-15 – y esto es solo la punta del iceberg! Otras atracciones incluyen la participación del equipo de paracaidismo "Wings of Blue" de la Academia de la Fuerza Aérea, y la presentación del equipo de adiestramiento de la Base de la Fuerza Aérea Lackland de San Antonio, Texas. El equipo de demostración aérea Thunderbirds cerrará con broche de oro este magno evento.

Por favor tómense tiempo de conversar con nuestros aviadores durante su visita. Estos profesionales y dedicados hombres y mujeres de la Fuerza Aérea son el motivo por el cual los Estados Unidos tienen la fuerza aeroespacial más poderosa del mundo. Además, estamos orgullosos del papel tan importante que desempeña Laughlin entrenando a los mejores pilotos del mundo.

Esperamos que todos se vayan de aquí con un mejor entendimiento y una mejor apreciación por la Fuerza Aérea de los Estados Unidos y la Base Aérea Laughlin.

Sinceramente,

Coronel Eric J. Rosborg
Comandante del Ala 47 de Entrenamiento de Vuelo

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Border Eagle
Laughlin Air Force Base, Texas ... Together we 'XL'

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Deadlines, Advertising

News for the Border Eagle should be submitted to the 47th Flying Training Wing Public Affairs Office, Bldg. 338, Laughlin AFB, TX, 298-5262. **Copy deadline is close of business each Thursday the week prior to publication.**

Advertising should be submitted to the Del Rio News-Herald, 2205 Bedell, Del Rio, TX, 774-4611. Advertising should be submitted by 4 p.m. each Friday.

Submissions can be e-mailed to:
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"Excellence – not our goal, but our standard."

– 47th FTW motto

Thunderbirds touch down at Laughlin

(Courtesy photo)

T-bird pilots wait on the flightline preparing for takeoff in F-16 Fighting Falcons.

Compiled from staff reports

The U.S. Air Force Thunderbirds, based at Nellis Air Force Base in Las Vegas, Nev., performs precision aerial maneuvers to exhibit the capabilities of modern high-performance aircraft to people throughout the world.

Thunderbirds members exhibit the same professional qualities of all Air Force people who fly, maintain and support these aircraft.

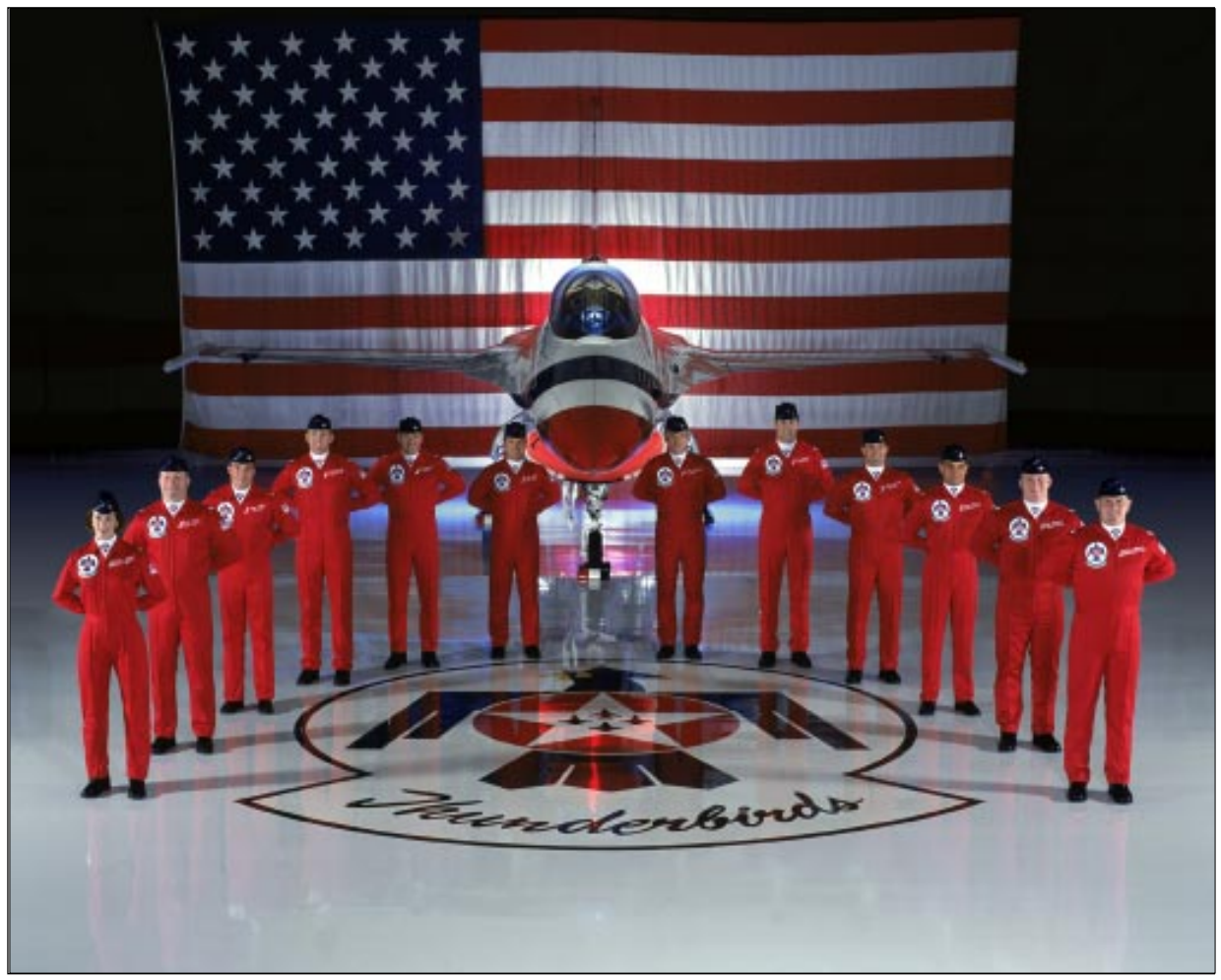
The Thunderbirds squadron is an Air Combat Command unit comprised of eight pilots (six are demonstration pilots), four support officers, four civilians, 104 active-duty enlisted people and two National guardsmen performing in more than 27 different career fields.

The pilots perform about 30 maneuvers in a demonstration. The entire show, including ground and air, lasts about an hour and 15 minutes. The season lasts from March to November, with winter months used to train new members.

The squadron performs no more than 88 air demonstrations each year and has never canceled a demonstration due to mechanical difficulty. More than 280 million people in all 50 states and 57 foreign countries have seen the red, white and blue F-16s in more than 3,500 aerial demonstrations.

The F-16 Fighting Falcon represents the full range of capabilities possessed by Air Force tactical fighters. The highly maneuverable, multi-role fighter has proven to be one of the world's best precision tactical bombers and air-to-air combat aircraft.

The Thunderbirds will be available for autographs after the demonstration.



(Courtesy photo)

Shown are the U.S. Air Force Thunderbirds in front of an F-16 Fighting Falcon, the jet used by the aerial team.

Air Force Thunderbirds' Autographs:

U.S. AIR FORCE
Thunderbirds

Wings of Blue Parachute Team to drop in on Laughlin

During a normal Wings of Blue demonstration, 12 parachutists exit the jump aircraft in four separate maneuvers at altitudes ranging from 4,500 to 11,000 feet above ground level. The team uses colored smoke to aid spectators in seeing the demonstration.

On the first pass, wind drift indicators are dropped from the jump aircraft. These weighted pieces of crepe paper are designed to fall at the same rate as an open canopy. The jumpmaster drops the indicators just as the aircraft passes directly over the target at an altitude of 2,500 feet, the lowest altitude at which the jumpers will open their canopies. The jumpmaster watches to see where the indicators land and uses this information to determine the exact point at which the jumper should exit the aircraft to land in the target area.

Canopy Show

The second pass is the canopy show, where four parachutists exit the jump aircraft from 4,500 feet above the ground. They freefall for about 10 seconds before deploying their parachutes. The team uses the high performance square parachute, which has a vertical descent rate of 2 to 16 feet per second and can reach forward speeds of up to 30 miles per hour. Shaped like an airfoil, it exhibits some of the same flight characteristics as the wing of an airplane.

Barber Pole Show

The third pass is the barber pole show, where two parachutists exit the aircraft from 7,000 feet. The jumpers come together in mid-air and begin to spin, by a slight movement of one arm or leg, or by dipping one shoulder. As they spin, the colored smoke they are carrying forms the barber pole. At 4,000 feet, they begin moving apart, and at 2,500 feet, they deploy their parachutes.

High-Low Show

The fourth pass is the high-low show, where two parachutists exit the plane from 9,000 feet. One assumes the basic spread-eagle position, which allows him or her to fall as slowly as 85 miles per hour. The second jumper streamlines his or her body and pitches over into a head-first dive, allowing the parachutist to reach speeds in excess of 200 miles per hour. Both deploy their parachutes at 2,500 feet. Each second of delay in opening between the first and second parachutists represents approximately 150 feet of vertical separation between the two jumpers.

Bomb Burst Show

The final pass is the bomb burst show, where four jumpers exit the aircraft from 11,000 feet.

(Courtesy photo)

They maneuver their bodies in freefall to join into a four-man star, holding this position until 5,000 feet. At this altitude they break the star, turn and track away from each other. The smoke they carry creates the spectacular bomb-burst effect. They deploy their parachutes at 2,500 feet.

Lackland Air Force Base Drill Team to perform

The Lackland Air Force Base Precision Rifle Drill Team, "The Warhawks," serves to foster pride and confidence in the evolving Expeditionary Aerospace Force, inspire Air Force awareness in the local community and encourage young people to serve their country.

As premier "Ambassadors in Blue," the drill team spends countless hours on the drill pad preparing for its performances. A standard performance will last 10 minutes and showcases a professionally choreographed routine full of show-stopping weapon manuals, precise toss, and complex weapon exchanges.

Through its routines with fully operational M-1 rifles, the drill team embodies teamwork, professionalism and discipline. The drill team fields an incredible four-person show. Team members simultaneously hurl their 13-pound weapons over and around the commander, performing a sequence of events unmatched by any other base-level team. This voluntary unit has dazzled spectators within San Antonio and the state of Texas at military and civilian events.

Since Dec. 15, 2000, the Warhawks have performed at awards banquets, unit commanders' calls, local elementary and Boy Scout assemblies, and for visiting basic training family members. The Warhawks literally touch thousands of people each year. The team's drive to excel, its strong sense of dedication, and high level of professionalism proves that in the Air Force, "No One Comes Close."

Members are: Staff Sgt. Herman Ybarra, non-commissioned officer in charge, 37th Civil Engineer Squadron; Tech. Sgt. Anthony Patterson, assistant NCOIC, 737th Training Support Squadron; Staff Sgt. Cristopher M. Banks, 737th TRSS; Staff Sgt. Daniel Lange, 37th CES; Senior Airman Edward Jones, 37th CES; Airman 1st Class Kevin Oakley; 37th Transportation Squadron; Airman 1st Class Jeremy Carsten, 33rd Information Operations Squadron; Airman 1st Class Citlaltzin Nunez, 37th Communications Squadron.

Help keep the base clean. Please throw all trash into trash cans.

F-117A Nighthawk

(Courtesy photo)

Mission

The F-117A Nighthawk is the world's first operational aircraft designed to exploit low-observable stealth technology.

Features

The unique design of the single-seat F-117A provides exceptional combat capabilities. About the size of an F-15 Eagle, the twin-engine aircraft is powered by two General Electric F404 turbofan engines and has quadruple redundant fly-by-wire flight controls. Air refuelable, it supports worldwide commitments and adds to the deterrent strength of U.S. military forces.

The F-117A can employ a variety of weapons and is equipped with sophisticated navigation and attack systems integrated into a state-of-the-art digital avionics suite that increases mission effectiveness and reduces pilot workload. Detailed planning for missions into highly defended target areas is accomplished by an automated mission planning system developed specifically to take advantage of the unique capabilities of the F-117A.

(Courtesy photo)

Background

The first F-117A was delivered in 1982, and the last delivery was in the summer of 1990. The F-117A production decision was made in 1978 with a contract awarded to Lockheed Advanced Development Projects, the "Skunk Works," in Burbank, Calif. The first flight was in 1981, only 31 months after the full-scale development decision. Air Combat Command's only F-117A unit, the 4450th Tactical Group, (now the 49th Fighter Wing, Holloman Air Force Base, N.M.), achieved operational capability in October 1983.

Streamlined management by Aeronautical Systems Center, Wright-Patterson AFB, Ohio, combined breakthrough stealth technology with concurrent development and production to rapidly field the aircraft. The F-117A program has demonstrated that a stealth aircraft can be designed for reliability and maintainability. The aircraft maintenance statistics are comparable to other tactical fighters of similar complexity. Logistically supported by Sacramento Air Logistics Center, McClellan AFB, Calif., the F-117A is kept at the forefront of technology through a planned weapons system improvement program located at USAF Plant 42 at Palmdale, Calif.

General Characteristics

Primary Function: Fighter/attack
Contractor: Lockheed Aeronautical Systems Co.
Power Plant: Two General Electric F404 engines
Length: 65 feet, 11 inches (20.3 meters)
Height: 12 feet, 5 inches (3.8 meters)
Weight: 52,500 pounds (23,625 kilograms)
Wingspan: 43 feet, 4 inches (13.3 meters)
Speed: High subsonic
Range: Unlimited with air refueling
Armament: Internal weapons carriage
Unit Cost: $45 million
Crew: One
Date Deployed: 1982
Inventory: Active force, 54; ANG, 0; Reserve, 0

The First Aid tent is located in Hangar 3.

AIR AMISTAD 2002

(Courtesy photo)

F-18 Hornet

Service

Navy and Marine Corps

Description

All-weather fighter and attack aircraft. The single-seat F/A-18 Hornet is the nation's first strike-fighter. It was designed for traditional strike applications such as interdiction and close air support without compromising its fighter capabilities. With its excellent fighter and self-defense capabilities, the F/A-18 at the same time increases strike mission survivability and supplements the F-14 Tomcat in fleet air defense. F/A-18 Hornets are currently operating in 37 tactical squadrons from air stations worldwide, and from 10 aircraft carriers. The U.S. Navy's Blue Angels Flight Demonstration Squadron proudly flies them. The Hornet comprises the aviation strike force for seven foreign customers including Canada, Australia, Finland, Kuwait, Malaysia, Spain and Switzerland.

Features

The F/A-18 Hornet, an all-weather aircraft, is used as an attack aircraft as well as a fighter. In its fighter mode, the F/A-18 is used primarily as a fighter escort and for fleet air defense; in its attack mode, it is used for force projection, interdiction and close and deep air support.

Background

The F/A-18 demonstrated its capabilities and versatility during Operation Desert Storm, shooting down enemy fighters and subsequently bombing enemy targets with the same aircraft on the same mission, and breaking all records for tactical aircraft in availability, reliability and maintainability.

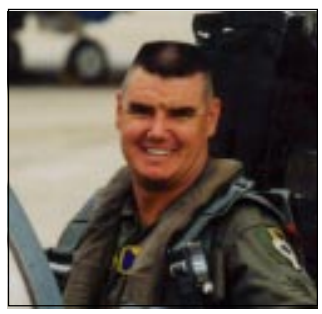
Hornets taking direct hits from surface-to-air missiles, recovering successfully, being repaired quickly and flying again the next day proved the aircraft's survivability. The F/A-18 is a twin engine, mid-wing, multi-mission tactical aircraft. The F/A-18A and C are single-seat aircraft. The F/A-18B and D are dual-seaters. The B model is used primarily for training, while the D model is the current Navy aircraft for attack, tactical air control, forward air control and reconnaissance squadrons. The newest models, the E and F were rolled out at McDonnell Douglas Sept. 17, 1995. The E is a single seat while the F is a two-seater.

All F/A-18s can be configured quickly to perform either fighter or attack roles or both, through selected use of external equipment to accomplish specific missions. This "force multiplier" capability gives the operational commander more flexibility in employing tactical aircraft in a rapidly changing battle scenario. The fighter missions are primarily fighter escort and fleet air defense, while the attack missions are force projection, interdiction, and close and deep air support.

General Characteristics

Primary Function: Multi-role attack and fighter aircraft
Contractor: Prime; McDonnell Douglas; Major Subcontractor; Northrop
Unit Cost: $29 million
Propulsion: Two F404-GE-402 enhanced performance turbofan engines
Thrust: 17,700 pounds (8,027 kg) static thrust per engine
Length: 56 feet (16.8 meters)
Height: 15 feet 4 inches (4.6 meters)
Speed: Mach 1.7+
Crew:
A, C and E models: One
B, D and F models: Two
Date Deployed:
First flight, November 1978
Operational, October 1983 (A/B models); September 1987 (C/D models)

The Voice of Air Amistad 2002

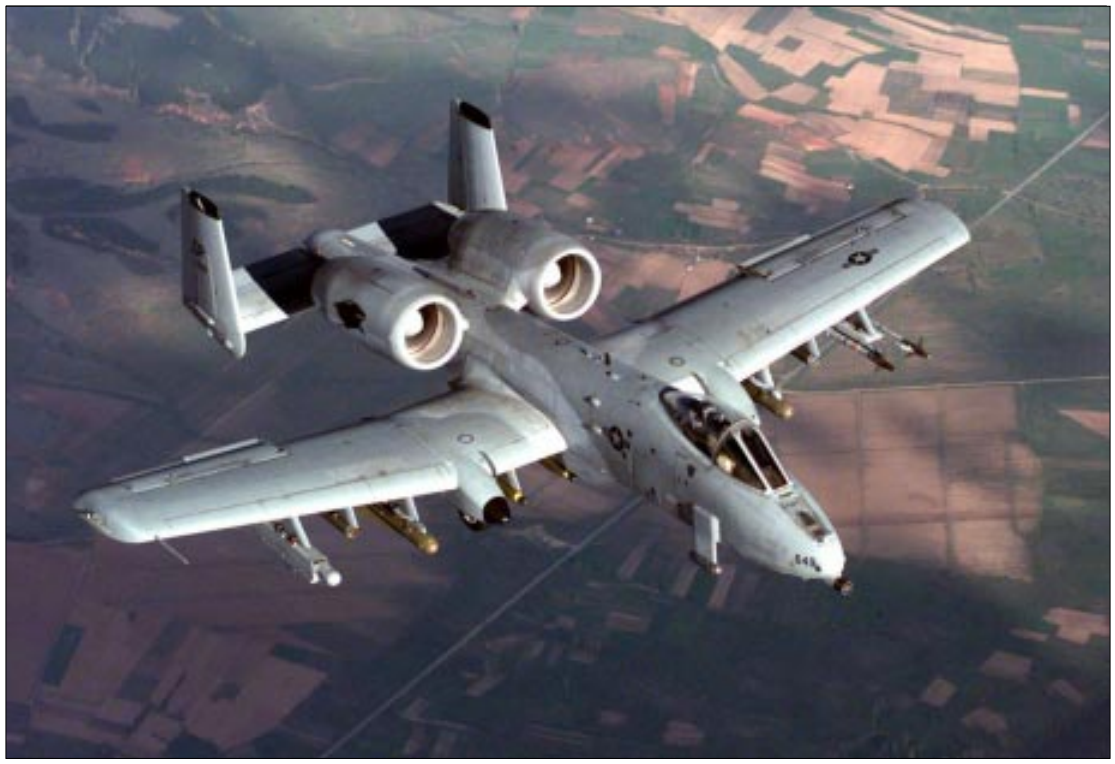


Capt. Jon Counsell

Capt. Jon Counsell first narrated an air show in 1995 at Fairchild Air Force Base, Alaska, which quickly drew accolades from fans, performers and base leadership. Since that first show, he has now performed more than 25 shows in front of more than 2 million fans at five different bases. He has received two formal awards for his narration, as well as the respect of performers, producers and fans.

Counsell is a senior pilot with more than 1,350 hours in the F-15C, AT-38, T-37, A-4 and T-6. He is a basic military parachutist and a civilian commercial pilot. He is currently stationed at Naval Air Station Pensacola, Fla., as a T-34 instructor pilot.

West Coast A-10 Demonstration Team



(Courtesy photo)

The West Coast A-10 Demonstration Team is one of six fighter demonstration teams sponsored by the U.S. Air Force's Air Combat Command.

The West Coast A-10 Demonstration Team is assigned to the 355th Wing at Davis-Monthan Air Force Base, Tucson, Ariz. During the 2001 season, the team performed at 30 show sites in the United States and Canada for more than 10 million spectators. The team pilot and officer in charge is Capt. Robert E. Kiebler, a veteran fighter pilot with more than seven years experience in high-performance aircraft.

The A-10 demonstration is designed to highlight the superior performance characteristics of the aircraft.

The combination of high and low speed maneuvering, rapid rolls, maximum performance climbs, descents and simulated weapons employment vividly illustrate the Thunderbolt II's capabilities.

The demonstration team's mission is to promote recruiting and retention through understanding of the Air Force and its mission. After the show, team members answer questions about the demonstration and the Air Force in general. Team members often make community service and media appearances at show locations.

Narrators for the team are Maj. Mark Lambertsen, Capt. Chris Zentner, Capt. Jim Varden, Capt. David Haworth and 1st Lt. Drew Dougherty. The team has a noncommissioned officer in charge and six crew chiefs assigned to provide maintenance support: Master Sgt. Anthony Wende, Tech. Sgt. Rob Munoz, Staff Sgt. Michael Minamyer, Staff Sgt. Michael Kozeniesky, Staff Sgt. Chad Edwards, Senior Airman Jacob Smith, and Senior Airman Nicholas Xenos. Three of these people travel to each air show.

Lost your child?

All lost children will be directed to the Lost Children Booth, located by the narrator's podium near the main stage.

(Courtesy photo)

T-6A Texan II

Mission

The T-6A Texan II is a single-engine, two-seat primary trainer designed to train specialized undergraduate pilot training students in basic flying skills.

Features

Produced by Raytheon Aircraft, the T-6A Texan II is a military trainer version of Raytheon's Beech/Pilatus PC-9 Mk II.

Stepped-tandem seating in the single cockpit places one crewmember in front of the other, with the student pilot in the front seat and the instructor pilot in the rear. A pilot may also fly the aircraft alone from the front seat. Pilots enter the T-6A cockpit through a side-opening, one-piece canopy that has demonstrated resistance to bird strikes at speeds up to 270 knots.

The T-6A has a Pratt & Whitney Canada PT6A-68 turbo-prop engine that delivers 1,100 horsepower. Because of its excellent thrust-to-weight ratio, the aircraft can perform an initial climb of 3,300 feet per minute and can reach 18,000 feet in less than six minutes.

The aircraft is fully aerobatic and features a pressurized cockpit with an anti-G system, and an advanced avionics package with sunlight-readable liquid crystal displays.

Background

Before being formally named in 1997, the T-6A was first identified in a 1989 Department of Defense Trainer Aircraft Master Plan as the aircraft portion of the Joint Primary Aircraft Training System, or JPATS. The system includes an integrated suite of simulators, training devices and computer management system.

On Feb. 5, 1996, Raytheon was awarded the JPATS acquisition and support contracts. The first operational T-6A arrived at Randolph Air Force Base in May 2000.

The T-6A will be used to provide the basic skills necessary for specialized undergraduate pilot students to progress to one of four tracks: the Air Force bomber-fighter track, the Air Force airlift-tanker or Navy maritime track, the Navy strike track, or the Air Force-Navy helicopter track.

Instructor pilot training in the T-6 began at Randolph in 2000. Undergraduate pilot training began in October 2001 at Moody AFB, Ga.

The T-6 will begin phasing out the T-37 as the primary trainer at Laughlin beginning in the fall of 2002.

T-1A Jayhawk

Mission

The T-1A Jayhawk is a medium-range, twin-engine jet trainer used in the advanced phase of specialized undergraduate pilot training for students selected to fly airlift or tanker aircraft.

Features

The swept-wing T-1A is a military version of the Beech 400A. It has cockpit seating for an instructor and two students and is powered by twin turbofan engines capable of an operating speed of Mach .73. The T-1A differs from its commercial counterpart with structural enhancements that provide for a large number of landings per flight hour, increased bird strike resistance and an additional fuselage fuel tank.

Background

The first T-1A was delivered to Reese Air Force Base, Texas, in January 1992, and student training began in 1993.

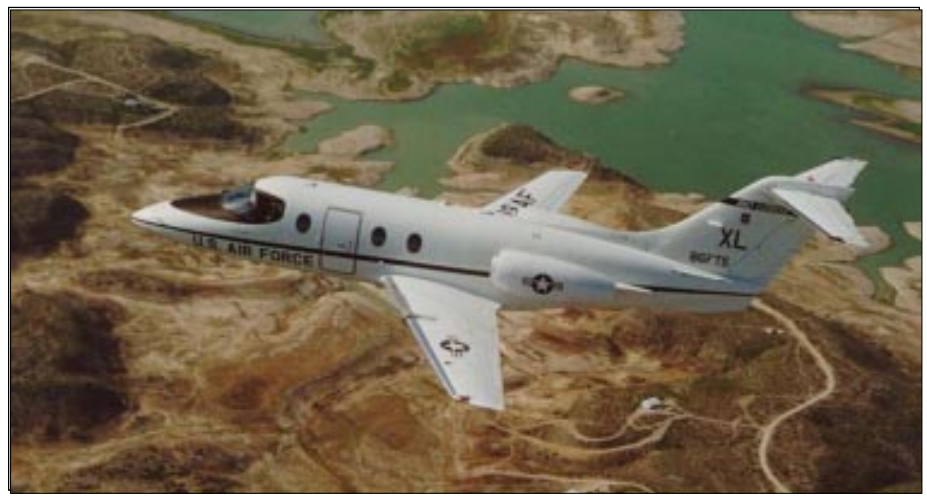
Since the late 1950s, Air Force undergraduate pilot training students trained in two aircraft: the T-37 Tweet, the primary trainer, and the T-38 Talon, the advanced trainer. With the introduction of specialized undergraduate pilot training in 1993, students continue to receive their primary flying training in the T-37, but the advanced phase was tailored for students' follow-on assignments.

For students going to bombers and fighters, advanced training is conducted in the T-38. Those selected for airlift or tanker aircraft receive advanced training in the T-1A.

The T-1A is used at Laughlin AFB, Columbus AFB, Miss. and Vance AFB, Okla. It is also used at Randolph AFB to train instructor pilots.

General Characteristics

Primary Function: Advanced trainer for airlift and tanker pilots



(Courtesy photo)

Builder: Raytheon Corp.
Power Plant: Two Pratt and Whitney JT15D-5B turbofan engines
Thrust: 2,900 pounds each engine
Length: 48 feet, 5 inches (14.75 meters)
Height: 13 feet, 11 inches (4.24 meters)
Wingspan: 43 feet, 6 inches (13.25 meters)
Maximum Speed: 539 miles per hour (Mach .78)
Ceiling: 41,000 feet (12,500 meters)
Maximum Takeoff Weight: 16,100 pounds (7,303 kilograms)
Range: More than 2,100 nautical miles
Armament: None
Crew: Three (pilot, co-pilot, instructor pilot)
Date Deployed: February 1992
Unit Cost: $4.1 million
Inventory: Active force, 180; ANG, 0; Reserve, 0

T-37 Tweet

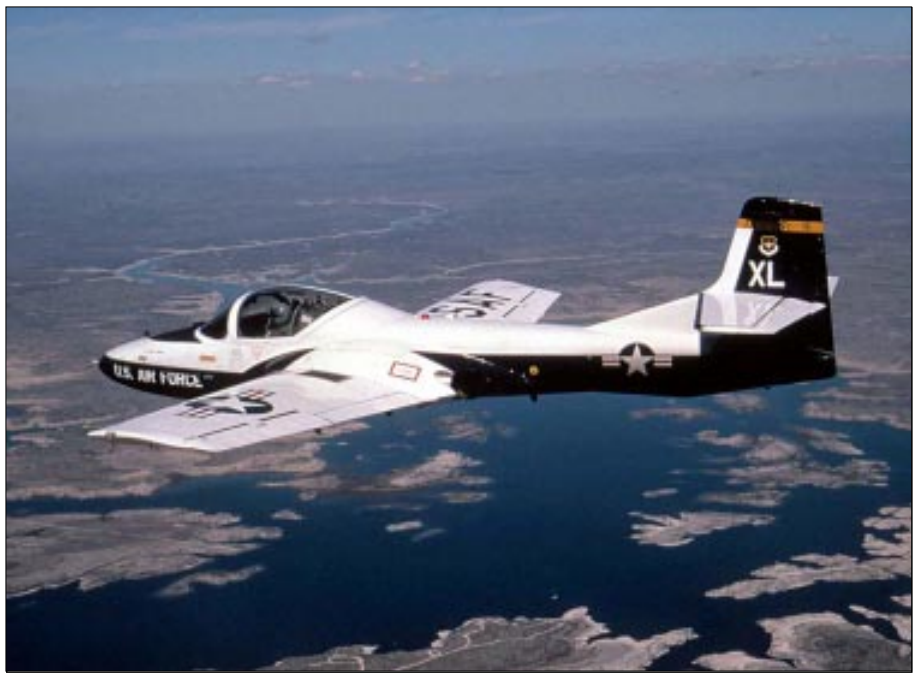
Mission

The T-37B Tweet is a twin-engine jet used for training specialized undergraduate pilot training students in the fundamentals of aircraft handling, and instrument, formation and night flying.

Features

The twin engines and flying characteristics of the T-37B give student pilots the feel for handling the larger, faster T-38 Talon or T-1A Jayhawk later in the SUPT. The instructor and student sit side by side for more effective training. The cockpit has dual controls, ejection seats and a clamshell-type canopy that can be jettisoned.

The T-37B has a hydraulically operated speed brake, tricycle landing gear and a steerable nose wheel. Six rubber-cell, interconnected fuel tanks in each wing feed the main tank in the fuselage. The T-37B has improved radio navigational equipment, UHF radio and redesigned instrument panels.



(Courtesy photo)

Students from 12 North Atlantic Treaty Organization countries train in T-37Bs at Sheppard Air Force Base.

Background

The T-37A made its first flight in 1955 and went into service with the Air Force in 1956. The T-37B became operational in 1959. All T-37As were modified to T-37B standards.

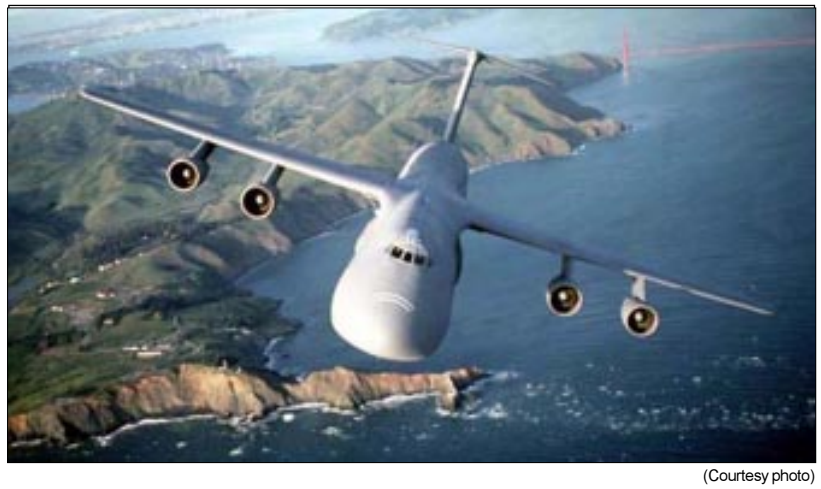
A contract was awarded in August 1989 to Sabreliner Corp. for the T-37B Structural Life Extension Program. The contract included the design, testing and production of kits, installed by a U.S. Air Force contract field team, which modified or replaced critical structural components for the entire fleet, extending the capability of the T-37.

More than 1,000 T-37s were built, and 419 remain in the U.S. Air Force inventory. At Laughlin the T-37 is being replaced by the T-6A Texan II beginning in the fall of 2002.

General Characteristics

Primary Function: Primary trainer in specialized undergraduate pilot training
Builder: Cessna Aircraft Co.
Power Plant: Two Continental J69-T-25 turbojet engines
Thrust: 1,025 pounds (461.25 kilograms) each engine
Length: 29 feet, 3 inches (8.9 meters)
Height: 9 feet, 2 inches (2.8 meters)
Maximum Takeoff Weight: 6,625 pounds (2,981 kilograms)
Wingspan: 33 feet, 8 inches (10.2 meters)
Speed: 360 mph (Mach 0.4 at sea level)
Ceiling: 35,000 feet (10.6 kilometers)
Range: 460 miles
Armament: None
Unit Cost: $164,854
Crew: Two – student pilot and instructor pilot
Date Deployed: December 1956
Inventory: Active force, 419; ANG, 0; Reserve, 0

C-5 Galaxy



(Courtesy photo)

Mission

The gigantic C-5 Galaxy, with its tremendous payload capability, provides the Air Mobility Command intertheater airlift in support of United States national defense. The C-5, the C-17 Globemaster III and the C-141 Starlifter are partners of AMC's strategic airlift concept. The aircraft carry fully equipped combat-ready military units to any point in the world on short notice, then provide field support required to help sustain the fighting force.

Features

The C-5 is one of the largest aircraft in the world. It can carry outsize and oversize cargo intercontinental ranges and can take off or land in relatively short distances. Ground crews can load and off-load the C-5 simultaneously at the front and rear cargo openings.

The C-5 is similar in appearance to its smaller sister transport, the C-141 Starlifter, although the C-5 is much larger. Both aircraft have the distinctive high T-tail, 25-degree wing sweep, and four turbofan engines mounted on pylons beneath the wings.

The Galaxy carries nearly all of the Army's combat equipment, including such bulky items as its 74-ton mobile scissors bridge, from the United States to any theater of combat on the globe.

Four TF39 turbofan engines power the big C-5, rated at 43,000 pounds thrust each. They weigh 7,900 pounds (3,555 kilograms) each and have an air intake diameter of more than 8.5 feet (2.6 meters). Each engine pod is nearly 27 feet long (8.2 meters).

General Characteristics

Primary Function: Outsize cargo transport
Prime Contractor: Lockheed-Georgia Co.
Power Plant: Four General Electric TF-39 engines
Thrust: 43,000 pounds each engine
Wingspan: 222.9 feet (67.89 meters)
Length: 247.1 feet (75.3 meters)
Height: 65.1 feet (19.84 meters)
Cargo Compartment: height, 13.5 feet (4.11 meters); width, 19 feet (5.79 meters); length, 143 feet, 9 in (43.8 meters)
Maximum Cargo: 270,000 pounds (122,472 kilograms)
Speed: 518 mph (.77 Mach)
Unit Cost: C-5A, $152.8 million
Deployed: C-5A, 1969; C-5B, 1980
Inventory: unavailable

Air show tips to remember

Compiled from staff reports

All on-base residents are strongly encouraged to walk to the air show.

For those who need transportation, transportation will be available; however, there will be only one shuttle bus for enlisted housing and one for officer housing, so large numbers of people cannot be supported without extremely long waits.

Buses will run every 10-15 minutes from 9 a.m. to 6 p.m. and will stop at the existing bus stops in housing.

For air show workers, buses will run through enlisted and officer housing from 6:30 to 8 a.m.

Bicyclists may park and lock their bicycles inside the ball field fence east of Liberty Drive and across the street from the auto hobby shop.

Please note the following:

■ Be prepared for long traffic delays into the Main Gate.

■ Off-base people and the general public must enter Laughlin through the Main Gate. Unauthorized people attempting to enter through the West Gate will be redirected to the Main Gate.

■ For those on-base people who attend church off base, you can expect delays when you return to base.

■ The 47th Operations Group parking lot will close today beginning at 5:30 p.m. The last two rows will be available for people going cross-country and for all air crew sponsors.

■ The T-37/T-1 parking lot will close today at 5:30 p.m. Any vehicles left in the parking lot may be towed. Both parking lots will open to the base population Monday.

Highway 90 north of Laughlin AFB will be closed to all traffic at the approximate times below:

■ Saturday, May 11: for 10 minutes between 5:15 and 6 p.m. (during the Thunderbirds' arrival)

■ Sunday, May 12: from 3 to 3:45 p.m. (during the Thunderbirds' air show performance)

Think safety

- The air show announcer provides weather information when needed, special promotions and an abundance of interesting and informative information; please direct your ear to the show center.
- The sound of some of the aerial demonstrations may startle young children. Please keep this in mind while enjoying the show.
- The First Aid station is in Hangar 3. If an emergency occurs and you are unable to get to the First Aid station, flag down a military member for assistance.
- For your protection, as well as that of the performers, don't attempt to cross the flightline or any other lines of restrictions.
- Don't climb on the aircraft or other static displays unless invited by attending personnel.
- Remember, there are many sharp edges around each aircraft. Please be aware of your surroundings at all times.
- For convenience, there are portable restrooms located throughout the air show grounds.
- No smoking in the vicinity or under the wings of aircraft. Fuel tanks can leak. On hot days, fuel can also overflow through the vents as the fuel expands.
- For everyone's safety, animals, roller blades, bicycles, skateboards and glass containers aren't allowed on the flightline.

T-38A Talon

(Courtesy photo)

Mission

The T-38A Talon is a twin-engine, high-altitude, supersonic jet trainer used in a variety of roles because of its design, economy of operations, ease of maintenance, high performance and exceptional safety record.

Air Education and Training Command is the primary user of the T-38A for specialized undergraduate pilot training. Air Combat Command, Air Force Materiel Command and the National Aeronautics and Space Administration also use the T-38A in various roles.

Features

The T-38A has swept wings, a streamlined fuselage and tricycle landing gear with a steerable nose wheel. Two independent hydraulic systems power the ailerons, rudder and other flight control surfaces.

The instructor and student sit in tandem on rocket-powered ejection seats in a pressurized, air-conditioned cockpit. Critical components are waist high and can be easily reached by maintenance crews.

The T-38A needs as little as 2,300 feet (695.2 meters) of runway to take off and can climb from sea level to nearly 30,000 feet (9,068 meters) in one minute.

Background

Advanced SUPT students fly the T-38A in aerobatics, formation, night, instrument and cross-country navigation training.

Test pilots and flight test engineers are trained in T-38As at the U.S. Air Force Test Pilot School at Edwards Air Force Base, Calif. Air Force Materiel Command uses the T-38A to test experimental equipment such as electrical and weapon systems.

Pilots from most North Atlantic Treaty Organization countries train in the T-38A at Sheppard AFB through the Euro-NATO Joint Jet Pilot Training Program.

The National Aeronautics and Space Administration uses T-38A aircraft as trainers for astronauts and as observers and chase planes on programs such as the space shuttle.

Air Education and Training Command uses a modified version, the AT-38B, to prepare pilots for fighter aircraft such as the F-15, F-16 and A-10. The AT-38B has a gun sight and practice bomb dispenser.

The Talon first flew in 1959. More than 1,100 were delivered to the Air Force between 1961 and 1972 when production ended.

Pacer Classic is a program designed to extend the structural life of the T-38 to 2020. Future major modifications to the T-38 avionics systems will result in all Talons being redesignated as T-38C models.

General Characteristics

Primary Function: Advanced jet pilot trainer
Builder: Northrop Corp.
Power Plant: Two General Electric J85-GE-5 turbojet engines with afterburners
Thrust: 2,680 pounds dry thrust; 3,850 with afterburners
Length: 46 feet, 4 inches (14 meters)
Height: 12 feet, 10 inches (3.8 meters)
Wingspan: 25 feet, 3 inches (7.6 meters)
Speed: 812 mph (Mach 1.08 at sea level)
Ceiling: Above 55,000 feet (16,764 meters)
Maximum Takeoff Weight: 12,093 pounds (5,485 kilograms)
Range: 1,093 miles
Armament: T-38A: none; AT-38B: provisions for practice bomb dispenser
Unit Cost: $756,000
Crew: Two (student and instructor)
Date Deployed: March 1961
Inventory: Active force, 509; ANG, 0; Reserve 0

Two troops re-enlist at air show

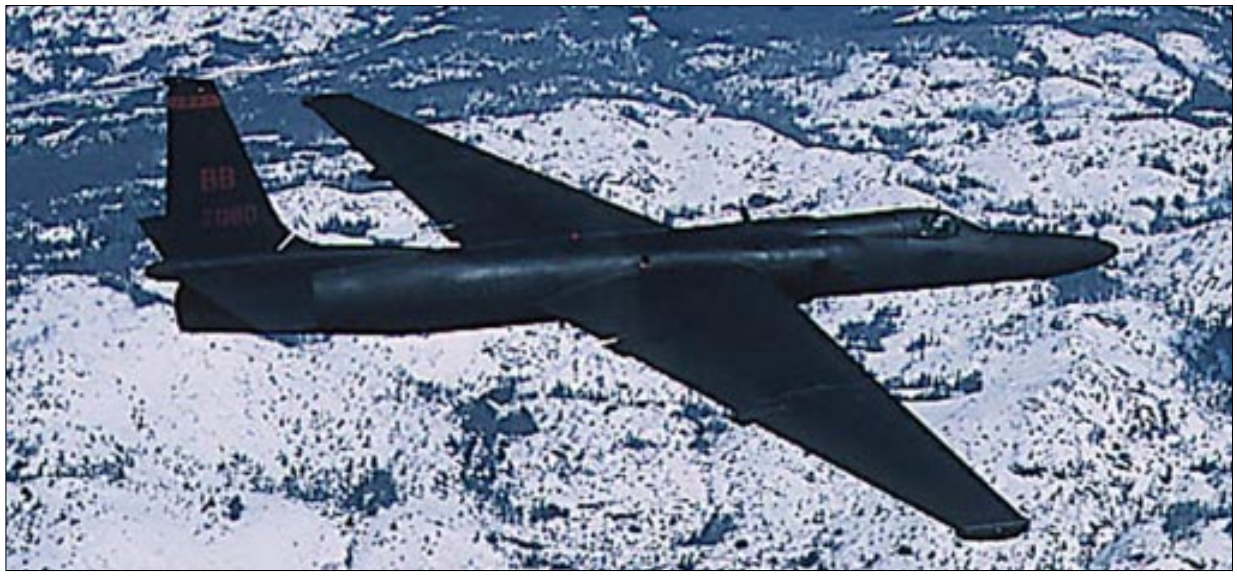
Compiled from staff reports

Two Laughlin troops will re-enlist in a special Air Amistad ceremony on the flightline at T-Bird One at 2 p.m. Sunday.

All air show attendees are invited to attend the ceremony.

Re-enlistees are Senior Airman Corazon Pol, 47th Aeromedical Squadron, and Senior Airman Alan James, 47th Communications Squadron.

U-2 Dragonlady



(Courtesy photo)

Mission

The U-2 provides continuous day and night, high-altitude, all-weather surveillance of an area in direct support of U.S. and allied ground and air forces. It provides critical intelligence to decision makers through all phases of conflict, including peacetime indications and warnings, crises, operations other than war and major theater war.

Features

The U-2S is a single-seat, single-engine, high-altitude, reconnaissance aircraft. High aspect ratio wings give the U-2 glider-like characteristics and make the aircraft extremely challenging to fly due to its unusual landing characteristics. Because of its high-altitude mission, the pilot must wear a full pressure suit, which adds to the challenge of flying the aircraft. It carries a variety of sensors, is extremely reliable and has a high mission-success rate.

The U-2 is capable of simultaneously collecting signals and imagery intelligence. Imagery intelligence sensors include either wet film photo, electro-optic or radar imagery. It can use both line-of-sight and beyond-line-of-sight data links.

The aircraft completed an upgrade to the General Electric F-118-101 engine in 1998. That upgrade provided better fuel economy, reduced weight and increased power. Other upgrades to the sensors and the addition of the Global Positioning System increased collection capability and provides superimposed geo-coordinates directly on collected images.

Background

Current models are derived from the original version that made its first flight in August 1955. On Oct. 14, 1962, it was the U-2 that photographed the Soviet military installing offensive missiles in Cuba. It provided critical intelligence data during all phases of Operations Desert Storm and Allied Force. It provides daily peacetime indications and warning intelligence collection from its current operating locations around the world.

When requested from the Federal Emergency Management Agency, the U-2 also has provided photographs supporting its disaster relief efforts.

The U-2R, first flown in 1967, is significantly larger and more capable than the original aircraft. A tactical reconnaissance version, the TR-1A, first flew in August 1981. Designed for standoff tactical reconnaissance in Europe, the TR-1A was structurally identical to the U-2R. The 17th Reconnaissance Wing, Royal Air Force Station Alconbury, England, used operational TR-1As from 1983 until 1991. The last U-2 and TR-1 aircraft were delivered to the Air Force in October 1989. In 1992 all TR-1s and U-2s were designated U-2Rs. After re-engining with the F-118-101 engine, they were designated U-2Ss.

U-2s are based at the 9th Reconnaissance Wing, Beale Air Force Base, Calif., and support national and tactical collection requirements from three operational detachments located around the world. U-2 pilots are trained at Beale initially using the U-2ST, the two-seat trainer version of the aircraft.

General Characteristics

Primary Function: high-altitude reconnaissance
Contractor: Lockheed Aircraft Corp.
Power Plant: One Pratt & Whitney J75-P-13B engine; one General Electric F-118-101 engine
Thrust: 17,000 pounds (7,650 kilograms)
Length: 63 feet (19.2 meters)
Height: 16 feet (4.8 meters)
Wingspan: 103 feet (30.9 meters)
Speed: 475+ miles per hour (Mach 0.58)
Maximum Takeoff Weight: 40,000 pounds (18,000 kilograms)
Range: Beyond 6,000 miles
Ceiling: Above 70,000 feet (21,212 meters)
Crew: One (two in trainer models)
Inventory: Active force, 35 (4 two-seat trainers); Reserve, 0; ANG, 0

Aerial demonstrations, flybys and statics

Flybys:

T-37
T-38
T-1
P-51/A-10 Heritage Flight
F-117 Nighthawk (Stealth)
T-38/T-37/T-1 Formation

Aerial demonstrations:

P-40 Aerobatic
A-10 Demonstration Team
P-51/JapZero Dogfight
T-28 Formation, Aerobatic
T-33/MiG-15 Dogfight/Aerobatic
U.S. Air Force Thunderbirds

Static Displays:

Air Force

Bombers: B-1
Airlift/Tanker: C-5, C-9, C-21, C-130, KC-135
Fighters: F-4, F-15C, F-15D, F-16, F-117
Trainers: T-1, T-37, T-38, T-38C, T-6A Texan II
Other: U-2

Army

Helicopters: Apache, UH-1H
Humvee

Navy

Fighters: F/A-18 Hornet
Trainers: T-34, T-45

Warbirds

Japanese Zero, P-40, P-51, MiG-15, T-28, T-33

International

Fighter: German Tornado

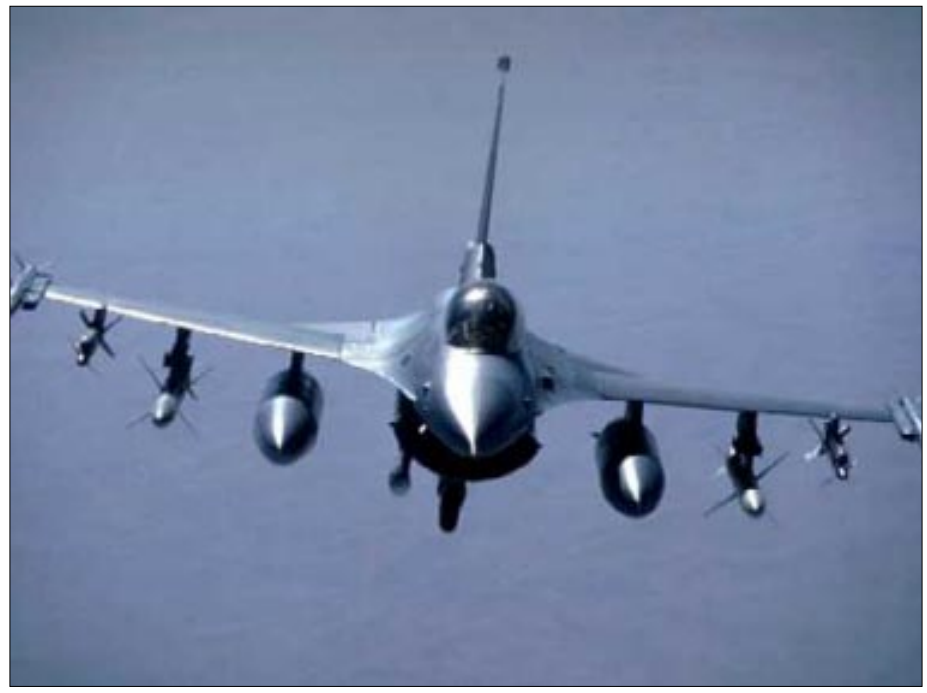
Other

Department of Public Safety helicopter
Border Patrol helicopter

Note: Demonstrations, flybys and static displays are subject to change without notice.

No smoking is permitted on the flightline.

F-16 Fighting Falcon



(Courtesy photo)

Mission

The F-16 Fighting Falcon is a compact, multi-role fighter aircraft. It is highly maneuverable and has proven itself in air-to-air combat and air-to-surface attack. It provides a relatively low-cost, high-performance weapon system for the United States and allied nations.

Features

In an air combat role, the F-16's maneuverability and combat radius (distance it can fly to enter air combat, stay, fight and return) exceed that of all potential threat fighter aircraft. It can locate targets in all weather conditions and detect low flying aircraft in radar ground clutter. In an air-to-surface role, the F-16 can fly more than 500 miles (860 kilometers), deliver its weapons with superior accuracy, defend itself against enemy aircraft, and return to its starting point. An all-weather capability allows it to accurately deliver ordnance during non-visual bombing conditions.

In designing the F-16, advanced aerospace science and proven reliable systems from other aircraft such as the F-15 and F-111 were selected. These were combined to simplify the airplane and reduce its size, purchase price, maintenance costs and weight. The light weight of the fuselage is achieved without reducing its strength. With a full load of internal fuel, the F-16 can withstand up to nine G's – nine times the force of gravity – which exceeds the capability of other current fighter aircraft.

The cockpit and its bubble canopy give the pilot unobstructed forward and upward vision, and greatly improved vision over the side and to the rear. The seat-back angle was expanded from the usual 13 degrees to 30 degrees, increasing pilot comfort and gravity force tolerance. The pilot has excellent flight control of the F-16 through its "fly-by-wire" system. Electrical wires relay commands, replacing the usual cables and linkage controls. For easy and accurate control of the aircraft during high G-force combat maneuvers, a side stick controller is used instead of the conventional center-mounted stick. Hand pressure on the side stick controller sends electrical signals to actuators of flight control surfaces such as ailerons and rudder.

Avionics systems include a highly accurate inertial navigation system in which a computer provides steering information to the pilot. The plane has UHF and VHF radios plus an instrument landing system. It also has a warning system and modular countermeasure pods to be used against airborne or surface electronic threats.